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CLAIMS

What is claimed is:

1. A method for the prevention or treatment of visceral pain comprising administering to a patient in need of treatment an effective amount of a compound of formula I-IV:

or a pharmaceutically acceptable salt thereof, wherein n is an integer of from 1 to 4.

2. A method for preventing or treating gastrointestinal disorders comprising administering to a patient in need of treatment an effective amount of a compound of formula I-IV:



or a pharmaceutically acceptable salt thereof, wherein n is an integer of from 1 to 4.

The method of Claim 1 or 2, wherein the compound is selected from: 3. (1α.6α.8β)(2-Aminomethyl-octahydro-inden-2-yl)-acetic acid, 5 (2-Aminomethyl-octahydro-inden-2-yl)-acetic acid, (2-Aminomethyl-octahydro-pentalen-2-yl)-acetic acid, (3-Aminomethyl-bicyclo[3.2.0]hept-3-yl)-acetic acid, $(1\alpha,3\alpha,5\alpha)$ -3-aminomethyl-bicyclo[3.2.0]heptane-3-acetic acid, (1α,5β)(3-Aminomethyl-bicyclo[3.1.0]hex-3-yl)-acetic acid, 10 (1α,5β)(3-Aminomethyl-bicyclo[3.2.0]hept-3-yl)-acetic acid, (1α,5β)(2-Aminomethyl-octahydro-pentalen-2-yl)-acetic acid, (1α,6β)(2-Aminomethyl-octahydro-inden-2-yl)-acetic acid, (1α.7β)(2-Aminomethyl-decahydro-azulen-2-yl)-acetic acid, (1α,5β)(3-Aminomethyl-bicyclo[3.1.0]hex-3-yl)-acetic acid, 15 (1α,5β)(3-Aminomethyl-bicyclo[3.2.0]hept-3-yl)-acetic acid, (1α,5β)(2-Aminomethyl-octahydro-pentalen-2-yl)-acetic acid, (1α,6β)(2-Aminomethyl-octahydro-inden-2-yl)-acetic acid, (1α.7β)(2-Aminomethyl-decahydro-azulen-2-yl)-acetic acid, $(1\alpha,3\alpha,5\alpha)(3-Aminomethyl-bicyclo[3.1.0]hex-3-yl)$ -acetic acid, 20 $(1\alpha,3\alpha,5\alpha)(2$ -Aminomethyl-octahydro-pentalen-2-yl)-acetic acid, $(1\alpha,6\alpha,8\alpha)(2-Aminomethyl-octahydro-inden-2-yl)$ -acetic acid, $(1\alpha, 7\alpha, 9\alpha)(2$ -Aminomethyl-decahydro-azulen-2-yl)-acetic acid, $(1\alpha,3\beta,5\alpha)(3-Aminomethyl-bicyclo[3.1.0]hex-3-yl)$ -acetic acid, $(1\alpha,3\beta,5\alpha)(3$ -Aminomethyl-bicyclo[3.2.0]hept-3-yl)-acetic acid, 25 $(1\alpha,3\beta,5\alpha)(2$ -Aminomethyl-octahydro-pentalen-2-yl)-acetic acid, (1α,6α,8β)(2-Aminomethyl-octahydro-inden-2-yl)-acetic acid, (1α,7α,9β)(2-Aminomethyl-decahydro-azulen-2-yl)-acetic acid, ((1R,3R,6R)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid,

((1R,3S,6R)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid,

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((1S,3S,6S)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid. ((1S,3R,6S)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid, ((1R,3R,6S)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, ((1R,3S,6S)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, ((1S,3S,6R)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, ((1S,3R,6R)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, $((3\alpha R, 5R, 7\alpha S)-5-Aminomethyl-octahydro-inden-5-yl)$ -acetic acid, ((3\alpha R,5S,7\alpha S)-5-Aminomethyl-octahydro-inden-5-yl)-acetic acid, $((3\alpha S.5S.7\alpha R)-5-Aminomethyl-octahydro-inden-5-yl)$ -acetic acid, $((3\alpha S, 5R, 7\alpha R) - 5 - Aminomethyl-octahydro-inden-5-yl)$ -acetic acid, ((2R,4αS,8αR)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, ((2S,4αS,8αR)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, ((2S,4αR,8αS)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, ((2R,4αR,8αS)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, $((2R,4\alpha S,9\alpha R)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)$ acetic acid, ((2S,4αS,9αR)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)acetic acid, $((2S,4\alpha R,9\alpha S)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)$ acetic acid, ((2R,4αR,9αS)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)acetic acid, ((1R,3R,6S)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid, ((1R,3S,6S)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid, ((1S,3S,6R)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid, ((1S,3R,6R)-3-Aminomethyl-bicyclo[4.1.0]hept-3-yl)-acetic acid, ((1R,3R,6R)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, ((1R,3S,6R)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, ((1S,3S,6S)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, ((1S,3R,6S)-3-Aminomethyl-bicyclo[4.2.0]oct-3-yl)-acetic acid, $((3\alpha R.5R.7\alpha R)-5-Aminomethyl-octahydro-inden-5-yl)$ -acetic acid,

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 $((3\alpha R, 5S, 7\alpha R)-5-Aminomethyl-octahydro-inden-5-yl)-acetic acid,$ $((3\alpha S, 5S, 7\alpha S)-5$ -Aminomethyl-octahydro-inden-5-yl)-acetic acid, $((3\alpha S, 5R, 7\alpha S)-5-Aminomethyl-octahydro-inden-5-yl)-acetic acid,$ ((2R,4αR,8αR)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, ((2S,4αS,8αR)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, ((2S,4αR,8αS)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, ((2R,4αS,8αS)-2-Aminomethyl-decahydro-naphthalen-2-yl)-acetic acid, ((2R,4αR,9αR)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)acetic acid, $((2S, 4\alpha R, 9\alpha R)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)$ acetic acid, ((2S,4\alphaS,9\alphaS)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)acetic acid, and ((2R,4αS,9αS)-2-Aminomethyl-decahydro-benzocyclophepten-2-yl)acetic acid, or a pharmaceutically acceptable salt thereof.

4. The method according to Claim 1 or 2, wherein the compound is the compound of formula I or a pharmaceutically acceptable salt thereof.

A method for the prevention or treatment of visceral pain comprising administering to a patient in need of treatment an effective amount of $(1\alpha,3\alpha,5\alpha)$ -3-aminomethyl-bicyclo[3.2.0]heptane-3-acetic acid or a pharmaceutically acceptable salt thereof.

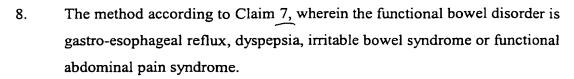
A method for preventing or treating gastrointestinal disorders comprising administering to a patient in need of treatment an effective amount of $(1\alpha,3\alpha,5\alpha)$ -3-aminomethyl-bicyclo[3.2.0]heptane-3-acetic acid or a pharmaceutically acceptable salt thereof.

7. The method according to any one of Claim 1 to 6, wherein the disorder is functional bowel disorder or inflammatory bowel disease.

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- 9. The method according to Claim 7, wherein the inflammatory bowel disease is Crohn's disease, ileitis or ulcerative colitis.
- 10. A method according to any one of Claims 1, 3, 4 or 5, wherein the disorder is associated with dysmenorrhea pain, pelvic pain, cystitis pain and pancreatitis.
- 11. A pharmaceutical composition for the treatment or prevention of visceral pain and GI disorders comprising a compound of formula I-IV.
- 12. The pharmaceutical composition according to claim 11 comprising $(1\alpha,3\alpha,5\alpha)$ -3-aminomethyl-bicyclo[3.2.0]heptane-3-acetic acid.
- 13. The pharmaceutical composition according to claim 11 or 12 for treating or preventing disorders selected from the group consisting of functional bowel disorders such as gastro-esophageal reflux, dyspepsia, irritable bowel syndrome, functional abdominal pain syndrome, or inflammatory bowel diseases such as Crohn's disease, ileitis or ulcerative colitis, or disorders associated with dysmenorrhea pain, pelvic pain, cystitis pain and pancreatitis.
- 14. The pharmaceutical composition according to any one of claims 11 to 13, which is under a form suitable for oral administration.